DOCUMENT RESUME

ED 323 693 EC 232 121

AUTHOR Lander, Jennifer L.
TITLE Enhancing Interdisciplinary Team Effectiveness: A Pre-Service Training Model for Physical and Occupational Therapy Students.
PUB DATE 24 Apr 90
NOTE 88p.; Ed.D. Practicum, Nova University.
PUB TYPE Dissertations/Theses - Practicum Papers (043) -- Tests/Evaluation Instruments (160)

EDRS PRICE MF01/PC04 Plus Postage.
DESCRIPTORS Children; *Disabilities; Higher Education; *Interdisciplinary Approach; *Occupational Therapy; *Physical Therapy; Questionnaires; *Role Perception; Seminars; Student Attitudes; *Teamwork; Therapists

ABSTRACT

The practicum provided interdisciplinary team educational experiences for students of physical and occupational therapy. Activities included administering a questionnaire to physical therapy students to determine student understanding of pediatric physical and occupational therapy role delineation. Questionnaires were also administered to graduates and practicing therapists to determine the need for pre-service training on the team approach and team effectiveness. A specialized pediatric physical therapy seminar course was conducted and evaluated in conjunction with an occupational therapy seminar course. Evaluation indicated that students increased their commitment to the importance of teamwork in pediatric therapy and increased cooperative activities between occupational and physical therapy faculty members. About half portion of the document consists of appendixes, including the pre/post-training questionnaire given to students, classification for analysis of questionnaire results, the questionnaire given to new graduates, the telephone interview question list, the physical therapy class syllabus, the case study assignment, the parent training handout, cooperative group games, examples of student responses, and raw data. (DB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED323693

PRACTICUM REPORT

Center for the
Advancement of Education
Ed.D. Program

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
This document has been reproduced as received from the person or organization originating it.
Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

Enhancing Interdisciplinary Team Effectiveness: A Preservice Training Model for Physical and Occupational Therapy Students

by

Jennifer L. Lander, MS. P.T.

3301 College Avenue
Fort Lauderdale, Florida 33314
305/475-7300

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
J. Lander
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

EC 232121

Enhancing Interdisciplinary Team Effectiveness: A Pre-Service Training Model for Physical and Occupational Therapy Students

by

Jennifer L. Lander, MS, P.T.

Cluster 27

NOVA UNIVERSITY

A Report of Practicum II Presented to the
Ed.D. Program in Early and Middle Childhood
in Partial Fulfillment of the Requirements
for the Degree of Doctor of Education.

PRACTICUM APPROVAL SHEET

This practicum took place as described herein.

Verifier:

Awilda R. Haskins

Awilda R. Haskins, MS, PT

Chairperson, Dept. of Physical Therapy
Title

Florida International University, Miami, FL

4.16.90
Date

This practicum report was submitted by Jennifer Lander under the direction of the advisor listed below. It was submitted to the Ed.D. Program in Early and Middle Childhood and approved in partial fulfillment of the requirements for the degree of Doctor of Education at Nova University.

Approved:

Polly M Peterson, Ph.D.

Polly Peterson, Ph.D.

4-24-90
Date

ACKNOWLEDGEMENT

The writer would like to acknowledge the participation of the physical therapy students who enrolled in this very specialized pediatric seminar, the occupational therapy students who enrolled in their respective seminar, and the faculty of both departments. She would also like to thank the clinics and other facilities for their time, effort and input into the program and the guest speakers for their inspiring sessions. A special thank-you is due to the practicum verifier, Willie Haskins, and practicum advisor, Polly Peterson, Ph.D. for their advice, encouragement, and approval.

Table of Contents

ACKNOWLEDGEMENT iii

TABLE OF CONTENTS iv

ABSTRACT vi

Chapter

I INTRODUCTION 1
Description of the Setting 1
Student Population 2
The Author's Role and Responsibilities ... 2

II STUDY OF THE PROBLEM 4
Problem Description 4
Problem Documentation 4
Analysis of the Causes 6
Related Literature 9

III ANTICIPATED OUTCOMES AND EVALUATION INSTRUMENTS 13
General Goals 13
Behavior Expected 14
Standard of Performance 14
Assessment Instruments 15
Analyzing the Results 16

IV SOLUTION STRATEGY 17
Discussion and Evaluation of Possible Solutions 17
Justification of Solution Selected 20
Description of Program 21

V RESULTS, CONCLUSIONS, RECOMMENDATIONS, AND DISSEMINATION 30
Results 30
Conclusions 31
Recommendations 34
Dissemination 35

REFERENCES 37

APPENDICES 42

APPENDICES

A PRE/POST-TRAINING QUESTIONNAIRE GIVEN STUDENTS 42

B SELECTED CLASSIFICATIONS FOR ANALYSIS OF QUESTIONNAIRE 46

C QUESTIONNAIRE GIVEN TO NEW GRADUATES 48

D PHONE INTERVIEW QUESTION LIST FOR UNIVERSITY PROGRAMS 50

E PHOTOGRAPH AND AUDIO RELEASE FORM 53

F PHYSICAL THERAPY CLASS SYLLABUS 55

G CASE STUDY ASSIGNMENT 59

H OTHER PT STUDENT PROJECTS 62

I PARENT TRAINING HANDOUT 68

J COOPERATIVE GROUP GAMES 70

K STUDENT RESPONSE EXAMPLES: PRE-POST 74

L RAW DATA: PRE- AND POST-TRAINING QUESTIONNAIRE 78

ABSTRACT

Enhancing Interdisciplinary Team Effectiveness: A Pre-Service Training Model for Physical and Occupational Therapy Students. Lander, Jennifer L., 1990: Major Practicum Report, Nova University, Ed.D. Program in Early and Middle Childhood. Descriptors: Interdisciplinary/Multidisciplinary/Team Approach/ Physical Therapy/Physical Therapy Education/Occupational Therapy/Occupational Therapy Education/Early Intervention/Related Services

This practicum was designed to provide various educational experiences to physical and occupational therapy students in order that they might gain a better understanding of the importance of team participation in the treatment of handicapped children. The primary goal for the educational model developed was to facilitate the students' ability to work cooperatively and collaboratively with other members of an interdisciplinary team. To enhance effectiveness as team members, the students needed to gain a better understanding of role overlap and delineation in various settings.

The writer administered a questionnaire to physical therapy students to determine their level of understanding of pediatric physical and occupational therapy role delineation. A questionnaire to graduates and practicing therapists was also administered to determine need for pre-service education regarding the team approach and team effectiveness. The writer designed and conducted a specialized pediatric physical therapy seminar course in conjunction with an occupational therapy seminar course and then developed, administered, and scored the program evaluation component.

The practicum was successful in attaining the goals. Analysis of the data revealed that the seminar increased the students' understanding of other team members' roles and enhanced their understanding of the importance of effective participation on a team. Faculty of both departments at the university have initiated inter-departmental projects to serve as role models of the team approach.

CHAPTER I

INTRODUCTION

Description of the Setting

The university in which the program resides is in the southeastern region of the United States and located in a large metropolitan area. The program is in the department of Physical Therapy in the College of Health. The Department of Occupational Therapy was also involved in the implementation of this practicum.

The curriculum of each program provides basic entry-level education which, upon satisfactory completion of required competencies, awards a Bachelor of Science degree in Physical Therapy or Occupational Therapy. Both programs are considered "limited enrollment" upper division programs. This means that the programs only accept a limited number of applicants. The physical therapy (PT) program limits their enrollment to 36 students in each of the junior and senior classes. The occupational therapy (OT) program limits their enrollment to 40 in each class.

Student Population

Because of this limited enrollment, the programs are able to choose the applicants who excel in each of the admissions requirements. Therefore, the programs are able to accept highly qualified and excellent students.

The students who participated in the implementation phase of this practicum were senior level physical therapy (n=6) and occupational therapy (n=8) majors who showed an interest in pediatric therapy and were enrolled in their respective elective course "Pediatric Seminar". These students had had courses on child development, adult neurological therapy techniques, orthopedics, and neurology (among other basic procedures courses in their own discipline).

Following this semester seminar course the students went into clinical facilities to do their required internships. Upon satisfactory completion of both the academic and clinical aspects of their education, they receive a B.S. degree from their respective program, which then makes them eligible to sit for the board exam necessary for licensure.

The Author's Role and Responsibilities

The author's present responsibilities include: (a) student advisement; (b) department, school, and

university committee membership and participation; (c) departmental research participation; and (d) teaching.

The author has responsibility teaching the PT students the following courses:

1. Evaluation Through the Life Cycle,
2. Life Cycle Lab,
3. Treatment of Pain,
4. Electrotherapy Lab,
5. Neurorehabilitation,
6. Neurorehabilitation Lab,
7. Neurohabilitation,
8. Neurohabilitation Lab, and
9. Pediatric Seminar.

In addition, she supervises students during their clinical internships.

The author has a Bachelor of Science degree in Physical Therapy and a Master of Science degree in Developmental Disabilities. She has many years of experience in various areas of physical therapy, six years of general and geriatric physical therapy experience and 17 years of pediatric experience. Of the 21 years of clinical experience, six years have been concurrent with her higher education teaching position. The author has also given many presentations related to the pediatric field.

CHAPTER II

STUDY OF THE PROBLEM

Problem Description

The problems defined for this practicum were that the physical therapy and occupational therapy students do not demonstrate an accurate understanding regarding the other discipline's rôle in the pediatric programs for children 0 - 3 years old; the students do not know how to work as team members with other professionals; and, the faculty of both departments (PT and OT) do not provide a good rôle-model for the team approach.

This combination of problems directly affects the quality of team participation when the students become professionals and must be effective team members.

Problem Documentation

To document the problems a two part questionnaire was given to the physical and occupational therapy students two years in a row (see Appendixes A & B). The results for both the open-ended question and the second part of the questionnaire showed that the students of both professions could identify some differences and similarities, but only a few mentioned that the two professions should work together (Lander & D'Agati,

1989). A similar questionnaire was given to new graduates whose first job required them to be a participant on an interdisciplinary team (see Appendix C). The new graduates all felt that it would have been beneficial to have had a class which dealt with teamwork issues and was open to both professions. Those who also take student interns indicated that an interdisciplinary class should be a requirement for a pediatric (PT/OT) intern.

Past experience of the author showed that new members of a team (at various facilities) were not participating adequately until they found out what each member did. Phone interviews of faculty members at 13 of the universities around the country which have either one or both occupational and physical therapy programs (see Appendix D) revealed that, in general, the faculty thinks it important that the students should be able to function effectively on a team after graduation, but few actually teach students how to do this.

The faculty at the writer's university were interviewed individually. the major questions were:

1. Do you actively role model interdisciplinary teamwork?

2. When you were practicing, did you participate in the team approach?

3. Do you think some classes should teach the team approach?

4. If given the opportunity, would you cross-discipline teach or participate in interdisciplinary research?

The resultant interviews revealed that the faculty (n=12) of both departments rarely openly display interdisciplinary teamwork. Only three are participating in concurrent practice with their teaching loads, however, all had practiced at one time in their professional career, and all had participated on a team at least once. All the faculty agreed that the team approach is an important item to be addressed within the curriculum. Six indicated that they would participate in interdisciplinary research and all said that they would teach cross-discipline if given the appropriate opportunity.

Analysis of the Causes

In analyzing the causes, one must understand that pediatric therapy, as it is known today, is a very new specialty in both professions. Teaching specialty areas in an undergraduate program is not a requirement of either of the professions' program accreditation

standards. Team approaches are not typically taught unless one is in a graduate program.

Physical and occupational therapy students are presumed generally competent in all entry-level aspects of the professions if they pass the academic curriculum and their clinical internships. Ninety-five percent of the graduates (PT) from this university pass the state board examination for licensure on their first attempt, and generally, those who do not, will pass it on the second attempt. General competency, however, does not necessarily mean competency to effectively work on a team or even know what skills the other professionals possess.

In the last three years the students have had to take an intra-departmental elective. The electives are seminar courses expanding the students' knowledge in one of the accepted specialties in their respective profession. These courses are to give the student a higher level of competence in a selected specialty, so that, if they choose, after graduation they will feel comfortable in narrowing their practice to a certain area within their profession.

One cause noted was that the students do not receive information regarding the other discipline's education, knowledge base, or rôle on a team within the

normal classes of the curriculum. The students usually are told how special their own profession is, without indication that the other disciplines are also important to the overall rehabilitation of a patient or the habilitation of a child.

Another cause which became apparent was the "superiority complex" which was possibly picked up from listening to other professionals who think that their own profession is better than the other. One comment written on the questionnaire by a PT student stated that "physical therapists could do everything that an occupational therapist could do, plus more". After reading this statement, the author asked the student why she had written that. The response was that she had been told that very thing from a practicing therapist! That therapist obviously did not know exactly what the other profession's skills were or he would not have made that statement at all.

A third cause of the problem which proved to be difficult to change was that the students do not see their instructors taking an active rôle in a team situation. It is difficult to learn a concept if one does not see the concept at work or in practice. In the university setting it appears to be difficult to rôle model the team approach when the departments are

completely separate entities and often physically separated on the campus. Generally, each of the faculty has his or her own courses to teach and his or her own projects going. It takes much time and effort to involve others in one's own pet projects, let alone try to coordinate varying time schedules and inter-department contacts.

Related Literature

In practice, the treatment objectives of physical and occupational therapists frequently overlap. Cooperative and complementary treatment planning is essential for maximum therapeutic benefit for the client. Unfortunately, in some settings, there is a high degree of competition and territorialism between the two disciplines.

Even though it is natural for each professional to hold high regard and value to his or her own discipline's skills, Wodrich and Joy (1986, chap. 10) urge professionals to set aside turf issues and show respect and appreciation for the competence of the other team members. Hirata (1980) calls for a more united force in providing services rather than bickering over "turfs". Grier (1980) relates some history of teamwork in relationship to his association's conference themes.

He tells of the 1936 American College Health Association's conference theme as being cooperation, the necessity of health care professionals to work cooperatively, long before these issues became major national concerns.

Others (Connolly & Anderson, 1978; Landreth, Jacquot, & Allen, 1969; McGonigel & Garland, 1988) write about the importance of professional teamwork in the holistic approach to treatment of children. With the recent passage of PL 99-457 (Part H) requiring a team approach for early intervention service delivery with a designated case manager for each child (Florida Department of Education, Office of Early Intervention, 1987; Garwood, Fewell, & Neisworth, 1988), it becomes imperative that professionals be able to work together.

Because the training of educational, behavioral science, and medical professionals is so varied, the resulting assessments of the client may be quite divergent in appearance (Wodrich & Joy, 1986). Wodrich and Joy also discuss the problem of issues relating to professional turf when deciding who should be the team leader and how to coordinate evaluation and intervention for the client. They make it quite evident that having an understanding of others' professional skills makes it easier to have a successful team.

Connolly and Anderson (1978) advocated for clinicians to have an "increased awareness of the interdisciplinary approach" (p437) to service delivery. Howard (1986), in her thorough review of the literature, noted that recommendations made by all three professional areas (PT, OT, and physicians) recognized the need for interdisciplinary education and training opportunities as well as other areas, e.g. working with families and general service delivery. Most of the authors cited by Howard focused only on making pediatric therapies an elective in school. Although one could argue that all areas of therapy should advocate the collaboration among professionals, pediatric therapists in practice seem to be more involved with this service delivery style.

In the universities which the writer contacted, the one program which actually team taught a course did this in an elective graduate level course. In their review of several surveys conducted to study various areas of pre-service training of occupational therapists in early intervention, Hanft and Humphry (1989, p. 60, Table 3) note that 97% of the programs surveyed (UNC, Chapel Hill, NC) taught their student about the "team process" a mean of 6.83 hours. No mentions of interdisciplinary team teaching were noted by the authors.

Other writers (Bertoti, 1989; Bricker, 1986; Fraser, Hensinger, & Phelps, 1987; Williamson, 1987) mention the importance of competent team approach for service delivery. Blackman (1988a, 1988b), in his editorial statements, noted that it was essential to interrelate basic working knowledge of complex disciplinary issues to support a successful interdisciplinary or transdisciplinary approach. He highly advocates collaboration among all professionals providing services to infants and young children.

Even though there are many articles advocating the team approach for intervention, there are very few which actually discuss how to teach or enhance this important skill. It is not enough to verbalize only the need and importance, there is a need to have more published about how one might structure the complex issues inherent in the team approach within pre-service undergraduate training programs. The transition from an isolated (departmental) education to the reality of having to participate effectively on a team would possible be enhanced through teaching models such as the one implemented in this practicum.

CHAPTER III

ANTICIPATED OUTCOMES AND EVALUATION INSTRUMENTS

General Goals

To give children the comprehensive services which many of them need is definitely beyond the scope of any one profession. It is, therefore, necessary to be able to participate with other professionals to deliver the most appropriate intervention for each individual client. As a result, the following goals were projected for this practicum:

1. The students will demonstrate an understanding of the other professional's skills.

2. Given a specific case history, the students will be able to work effectively on a team to produce an appropriate service model of care.

3. The faculty will provide a rôle-model in cross disciplinary teamwork and practice.

Behavior expected

The behavioral objectives were related to the stated goals and the documented problems. The following behavioral objectives were selected for this practicum:

1. The students will show an increase in instances of appropriate response regarding the importance of teamwork in the practice of their profession.

2. The students will demonstrate a more accurate understanding of two professions' rôle overlap and delineations. This data will be collected from the second part of the post-training questionnaire.

3. The faculty of the OT and PT will demonstrate teamwork as a rôle-model in at least two continuing instances.

Standard of Performance

The following standards of performance were used to measure behavioral expectations:

1. Upon completion of the Pediatric Seminar course and following their pediatric internship, at least five of the six physical therapy students will mention the importance of teamwork in the practice of their profession.

2. Upon completion of the Pediatric Seminar course and following their pediatric internship, five out of

the six physical therapy students will show a more accurate understanding of the two professions' rôle overlap and delineations.

3. After ten months of practicum implementation, at least one faculty from each department (PT and OT) will demonstrate teamwork as a rôle-model in at least two continuing instances.

Assessment Instruments

The following assessment instruments were used to measure the standards of performance:

1. The pre- and post-training questionnaire was the same for the students. Both the writer and the OT faculty member coded and scored the classifications of the instrument as indicated in Appendix B.

2. The second part of the questionnaire was scored according to the competencies as outlined by the Pediatric Specialty Council of the American Physical Therapy Association, Education Committee of the Section on Pediatrics (APTA), the pediatric competencies of practice as outlined by the American Occupational Therapy Association, and the recommendations for PT/OT rôle delineation Los Angeles Children's Hospital (Los Angeles Children's Hospital, 1985; Mehn, Dennis, & Rybsk, 1986; Scull & Deitz, 1989).

3. The continuing projects for rôle-modeling teamwork were noted and recorded in Chapter V.

4. A log was kept to document any deviations or unexpected events which occurred during the implementation or as a result of this practicum.

Analyzing the Results

1. The pre- and post-training questionnaire scores were compared categorically. However, for the purpose of analyzing the effects of the practicum in relation to the first standard of performance, only the category of "working together" was used. The results regarding the aspect of working together are discussed within this report.

2. The second part of the questionnaire was also compared using the categories of correct or incorrect rôle delineation and overlap. The results are discussed within this report.

3. The faculty demonstration of ongoing teamwork was assessed by analyzing student interview (feedback) and observations made by the author and selected faculty members. This is discussed within the report.

CHAPTER IV

SOLUTION STRATEGY

Discussion and Evaluation of Possible Solutions

There were a number of possible solutions. They included the following instructional strategies:

1. Straight didactic teaching of the various forms of team approach to both classes separately.

2. Combine the OT and PT classes for instruction.

3. Provide "hands-on" projects in which the students participate on a simulated team.

4. Provide pre-service training with the use of a slide-tape presentation.

5. Get the PT/OT faculty to participate in a team oriented project.

6. Provide experiences for the students to participate on a team at a clinic or health facility.

7. Videotape sessions of team meetings and interactions for use in classes.

A few of the questions which were asked when searching the literature for possible solutions were: How have the trends and legislative mandates impacted on the practice patterns of physical and occupational therapists? How have the professional educational programs responded to these changes in patterns of

practice? And, what recommendations have been made for the preparation of these professionals to work in the collaborative practice necessary for high quality patient care?

Public Law (PL) 99-457, which amends PL 94-142, specifies, among other important items, that services be provided to handicapped infants and toddlers (birth to three years old) by a team of appropriate professionals. The law also requires that the states establish procedures to ensure that these professionals are "appropriately and adequately prepared and trained" (U.S. 99th Congress, 1987, November 18, p. 1145).

An interesting model was developed at Eastern Michigan University to increase their health care provider (nursing, OT, social work, and dietician) students' ability to make a career decision about the type of interdisciplinary practice which would be best suited to their own style and needs (Ivey, Brown, Teske, & Silverman, 1988). These authors describe a teaching model for different collaborative efforts across discipline lines. They describe the team as being on a continuum from parallel practice to the cohesive interdisciplinary style of cooperative practice. The teaching model moves from looking at their own

profession to other disciplines' functions and on to observing a team at work in a field setting.

Three other articles emphasized the training of multicompetent professionals or providing joint degree programs at the graduate level (Beachey, 1988; Farel, 1988; McCollum & Thorp, 1988). Two issues confronting educational institutions are personnel shortages and rôle definitions and delineations. Their solution is to take professionals (with undergraduate degrees within one discipline) and prepare them in a graduate program as multicompetent professionals who can meet the multiple needs of infants and their families.

McCollum and Thorp (1988, p. 62) verify that "interdisciplinary practica, in which students from different disciplines engage in joint learning experiences, are uncommon at the pre-service level... Most programs have not been able to offer students opportunities to develop interdisciplinary teaming skills within actual situations."

Brandt and Magyary (1989) discuss the preparation of nurses at the master's level to function as members of interdisciplinary teams. They emphasize specialty courses, practicums, course projects, and research work in their program. Emphasis is also put on interacting with professionals from other disciplines through

courses, clinical practicums and research projects. These authors also make the suggestion that "a cross-school departmental structure needs to exist that encourages both faculty and students to interact within an interdisciplinary context" (p. 58). They also advocate for collaborative teaching, interdisciplinary teaching methods, and cross-department research.

Sending students to an interdisciplinary clinic was the solution chosen as a pilot study for both undergraduate and graduate students of various medical professions at the University of Wisconsin (Madsen, Gresch, Petterson, & Taugher, 1988). There was much support by the students, faculty and patients, which helped make this a successful interdisciplinary endeavor. It proved to be an integral component for the development of collaborative education.

Justification of Solution Selected

The solutions selected were a combination of integrated class meetings, hands-on projects, slide-tape presentation, faculty rôle-modeling, and experience on a team at a clinic or a health facility.

Weston and Cranton (1986) suggest that the curricular designer's task is a complex process. The task being "to select from among the various options the

combination of methods and materials which seem most appropriate for the objective, the learners, and the constraints of the instructional situation" (p. 277).

Therefore, taking into consideration the above, the specific reasons for selecting the solution combination were with regard to attaining the higher levels of each of the cognitive, affective, and psychomotor domains. Because the group was small, the lecture (didactic) format was not appropriate. Videotaping meetings would have been a great enhancement, but the university program is limited in funds and the instructor was limited in time. A slide-tape presentation was originally anticipated as an alternative to videotaping team meetings at various facilities, but proved to be a problem with photo and audio-taping consent difficulties (this is discussed further on page 22 and in Chapter V). Instead, the students made facility visits and observed the group dynamics of team meetings. Hands-on, team projects, team participation, and rôle-modeling were also utilized to involve the student in an active rôle in learning.

Description of Program

The full practicum program implementation consisted of eight and a half months of preparation, academic

instruction, and clinical time. The content of each of the stages and especially the academic time and their related outside assignments is discussed below along with the rest of the practicum calendar:

1. Months 1 & 2

a. Attended various interdisciplinary team meetings within a two county area. Discussed with each facility the purpose of the practicum and their potential rôle in assisting in the education of the pediatric therapy students. In six of the eight facilities it was concluded that it would be best if the students sat in on the meetings of several facilities, rather than do a slide-tape presentation. Several did not feel comfortable giving consent for the audio-tape recordings of the proceedings of their meetings. They claimed that many things said are to be held in strict confidential context, and that having tapes made may infringe upon the rights of their clients. They all, however, consented to having groups of four to six students observe their facility's team process. During the second month a schedule of dates, times, and numbers of students was produced.

b. Guest speakers from various disciplines were contacted and arrangements made for each to address the students.

c. A cooperative schedule was pulled together for teaching the OT and PT students together for seven of the 14 sessions. The author and the OT professor collaborated extensively in making a schedule and assignments for the students that would be mutually beneficial. It was decided that class sessions 1, 2, 5, 6, 9, 10, and 14 would be the sessions in which the OT and PT students participated in class together. The reader must keep in mind that each class session is three hours long. The class syllabus for the physical therapy students can be found in Appendix F.

2. Months 3, 4, 5, and 6.

PT and OT students were together for the class sessions described below. Some of these sessions were split sessions where the first hour of the session was conducted separately and the last two hours were together. The remaining class sessions' topics can be found on the syllabus in Appendix F.

Class Session 1

a. Students were given their required course projects for the semester. With the exception of the team project, the PT and OT students had different projects to submit for a grade (see Appendix H for the PT students' projects).

b. PT and OT students were assigned to four teams of one PT and one OT student and two teams of one PT and two OT students.

c. Team projects were assigned and discussed (see Appendix G).

d. Two movies were shown regarding the NICU and the life and death issues brought up for discussion.

e. Students (OT and PT) had an open discussion regarding their own professional education to this point in college.

f. The author discussed a few of the various rôles of the two disciplines and the different types of team approaches (multi-, trans-, and interdisciplinary).

Class Session 2

a. The PT students signed up for clinical team meetings times. Each student was required to sign up for at least three different meetings or 4-6 sessions in the NICU plus one team meeting (see Appendix H, Project IV).

b. A film was shown, and feeding and handling techniques were demonstrated. They practiced on baby dolls on which the PT students had put typical NICU IV lines and other tubes and monitor electrodes.

c. The second half of this session was conducted with the OT students. The guest speakers for this forum were from a pediatric private practice. Three

professions were represented, physical therapy, occupational therapy, and speech therapy. They discussed how the rôles are delineated in their practice setup, their model of the team approach, and each told of their own professional background. An open discussion was held at the end of the session.

Session 3 & 4 (see syllabus: Appendix F)

Session 5

a. Informal discussion was held regarding the two groups of students who had been able to participate in a team meeting by this class session. Good and bad points were brought out regarding the meetings.

b. The author and OT professor discussed a few of the various rôles of the two disciplines in different settings (ie., NICU, acute pediatric hospital, out-patient not-for-profit clinic, for-profit clinic, in-house public school setting, home-bound school program, and other types of pediatric settings).

c. Each PT and OT student presented their research critique to the class.

Session 6

a. The first two hours the PT and OT students had class separately.

b. The last hour the students met together. The session was a special movement lab. The students paired

up and one student moved the other from one posture to another using fingertip to fingertip pressure as cues. Kinesiology and an understanding of normal transitional movements is a prerequisite to this type of movement lab.

Session 7

a. This session was also held separately. The first hour was dedicated to practicing a few hands-on physical therapy intervention techniques.

b. The last two hours had a deaf education, early intervention teacher from the public school system as the speaker. She gave the students information regarding her educational background and how she works cooperatively with the "related services" therapists.

Session 8 (see syllabus: Appendix F)

Session 9

a. The PT and OT students were together for the whole session. The first portion dealt with the topic of parent training and methods of teaching skills to others (see Appendix I for primary handout of topics).

b. The second part of the session dealt with the importance of cooperative team work. Several games were played that demanded that the group develop strategies for organizing problem-solving techniques. A few of the games are described in Appendix J.

Session 10

a. The first hour and a half the students met separately (see syllabus: Appendix F)

b. During the second half of the class there was a guest lecture forum: the topic was the neonatal intensive care unit (NICU) practice setting. A physical therapist, occupational therapist, and speech therapist participated in this session. They emphasized the cooperative practice among the group and with the NICU nursing staff, social workers, and physicians.

Session 11 (see syllabus: Appendix F)

Session 12

a. Although this session was held separately, the topics are worthy of mentioning. A discussion of child abuse, ethics in practice, politics and policy making, and public awareness of infant and child issues was conducted.

b. A Speech, Language, and Hearing specialist from another university was the guest in the class for this session. She gave a description of her discipline's educational requirements and then held an open discussion on what her profession does in different pediatric settings and how effective treatment overlap and collaboration can be for the client.

Session 13 (see syllabus: Appendix F)

Session 14

a. Oral class presentations. Each team presented their case study treatment plans to the rest of the class.

b. The last two pages of the post-training questionnaire was given to the physical therapy students.

3. Months 7 and 8

Clinical internships. The physical therapy students participated on real teams during their pediatric internship. After each of the students completed their pediatric clinicals, they were given page one of the post-training questionnaire.

4. Months 1-8

Interested faculty were encouraged to invite other professionals to teach portions of their classes and to participate in cross-disciplinary teaching themselves. They were also encouraged to design research projects which included other disciplines.

5. Month 8 and 9

Post-training questionnaire and interview data was collected and analyzed.

6. Month 9

This final report was prepared and submitted.

No special permission was necessary for this practicum to be carried out with the exception of written consent forms for photograph (slides) and audio facsimile (cassette recordings) release (Appendix E).

The university provided classroom facilities as well as supplies and materials (slide production and media assistance). The clinical facilities were already in place and current contracts in effect. Guest lecturers were kind enough to donate their time to this project.

CHAPTER V

RESULTS, CONCLUSIONS, RECOMMENDATIONS, AND DISSEMINATION

Results

This practicum was designed to provide various educational experiences to physical therapy students in order that they might have a better understanding of the importance of team participation in the treatment of handicapped children. The approach used in this practicum was to facilitate the students' ability to work cooperatively and collaboratively with other members of an interdisciplinary team.

Evaluation of post-training questionnaire results and faculty/student informal interview shows the following:

1. All of the physical therapy students mentioned the importance of teamwork in the practice of pediatric therapy (see Appendix K for examples of answers).

2. All of the physical therapy students showed a more accurate understanding of the rôle overlap and delineation of pediatric physical and occupational therapies (see Appendix L for individual student data).

3. The informal post-training interview of the faculty showed that one PT and one OT faculty member are presently involved in two projects together, other PT

and OT faculty members are in the planning stages of three different research projects, and the author and the pediatric OT faculty member have started to plan a project with a Communication Disorders faculty member at another university (two counties away). At the students' post-training informal interview, they indicated that they were only aware of two of the projects, but had taken notice that the faculty from both departments were in each others' offices more often.

Conclusions

The program proved to be a success by the standards which were pre-set prior to the implementation of the training sessions. The first standard of performance for this practicum was met. All of the students did mention the importance of teamwork in the practice of their profession.

The second standard of performance was also met. The students did show a more accurate understanding of the two professions' rôle overlap and delineations.

The third standard of performance was met with higher than expected results.

It was interesting to note that in the pre-training narrative answer to page one of the questionnaire only one mentioned that OTs and PTs work together on goals

(no mention of working together on treatment), but in the narratives on the post-training form four of the students used the words "must" or "should" and the other two mentioned the fact that they worked together. It pleases this author that the students will be starting to practice their profession with high expectations of using the team approach to patient care.

It was also interesting to see the differences in the ratings that the students gave on the second and third pages of the questionnaire. The trend appears to be that there were more changes in what the PT students understood the OT profession does than changes in perceptions of their own profession (see Appendix L). The changes which were made reflected a better understanding of the rôles of each profession.

The understanding of professional delineation was even further expressed when the student teams presented their case studies at the end of the course. Both the OT professor and this author were very impressed with the high quality of cooperation and teamwork exhibited by the students. The students indicated that they learned a lot about the other profession from the students on their case study teams.

Two other positive, but unanticipated, effects were noted. Two junior level physical therapy students

approached the writer and indicated that they would like to do their senior research project (required) with some of the OT students next year if it could be arranged. They reported that they had heard that working with the other professional students was both interesting and fun.

The other carry-over effect which was not anticipated was demonstrated in a required course in which all senior physical therapy students participate. This course teaches the administration aspects of physical therapy as a business in different arenas. One of the projects, done in groups of four or five students, is the designing, budgetting, and marketing of a rehabilitation facility or physical therapy hospital department. It was interesting to note that for those groups which had one or more of the practicum students, the facilities which were designed all included an occupational therapy area and a few included other professional space (and respective budgetary requirements).

The writer found great satisfaction in the implementation of this practicum and working with the occupational therapy department and their students. All the students seemed to enjoy the sessions which were

held together and the participation necessary for the case studies.

The speakers for the forums were impressed that the students were being exposed to the other professions before they graduated. The clinical supervisors of the students at the pediatric facility affiliations indicated that the students were immediately able to confidently and effectively participate on teams.

In conclusion, the total program as implemented for this practicum was successful by all measures.

Recommendations

As with any new program, there are several aspects which could be improved. The forums, though seemingly successful, ended up being rushed for time for questions, etc. Perhaps scheduling more time for each group of speakers would be better. Also adding more professionals (nutritionists, social workers, nurses, etc.) may add a larger and integrated dimension to the whole idea of team approach to patient care.

Originally, the implementation called for videotaping and/or slides with cassette taping of a few different team meetings. However, that was not agreeable to all the facilities that would be involved. As a result, the students were invited to sit in on the

meetings with the understanding of strict confidentiality of information. The students actually liked going to the different meetings and reporting on them. When told what the original plan was, the students said that they felt they got more out of being there than they would have just seeing and hearing it on tapes. The change in plan actually worked out for the best in the long run.

Dissemination

Dissemination of several components of this practicum are already in the planning stages, and one aspect has already been done. The pre-training questionnaire data have already been presented at a national professional conference regarding the students' perceptions of what the other professionals (PT or OT) do. The results of this practicum have already been accepted as a paper presentation at a national professional conference.

The course (with a few changes) will be repeated in the next academic year and will be open for graduate students interested in pediatrics. The two departments have agreed to continue to support this combination of courses for the purpose of promoting the team approach.

A paper will be completed to be submitted to a national journal for publication. The author also anticipates that there will be many other opportunities for wide dissemination of this practicum.

REFERENCES

Beachey. W. (1988). Multicompetent health professionals: Needs, combinations and curriculum development. Journal of Allied Health, 17(4), 319-329.

Bertoti, D. B. (1989). Physical therapy for the child with mental retardation. In J. S. Tecklin (Ed.), Pediatric physical therapy (pp. 237-261). Philadelphia: J. B. Lippincott.

Blackman, J. A. (1988a). From the editor [editorial]. Infants and Young Children: An Interdisciplinary Journal of Special Care Practices, 1(1), v.

Blackman, J. A. (1988b). From the editor [editorial]. Infants and Young Children: An Interdisciplinary Journal of Special Care Practices, 1(2), v.

Brandt, P. A., & Magyary, D. L. (1989). Preparation of clinical nurse specialists for family-centered early intervention. Infants and Young Children: An Interdisciplinary Journal of Special Care Practices, 1(3), 51-62.

Bricker, D. D. (1986). Early education of at-risk and handicapped infants, toddlers, and preschool children. Glenview, IL: Scott, Foresman and Company.

Connolly, B., & Anderson, R. M. (1978). Severely handicapped children in the public schools: A new frontier for the physical therapist. Physical Therapy, 55, 433-438.

Experiential Therapists, Inc. (in press). Escape to reality. Houston: Author.

Farel, A. m. (1988). Public health in early intervention: Historic foundations for contemporary training. Infants and Young Children: An Interdisciplinary Journal of Special Care Practices, 1(1), 63-70.

Florida Department of Education. Office of early Intervention. (1987). Planning for comprehensive early intervention services: The goals and challenges. Tallahassee: State of Florida.

Fraser, B.A., Hensinger, R. N., & Phelps, J. A. (1987). Physical management of multiple handicaps: A professional's guide. Baltimore: Paul H. Brookes.

Garwood, S. G., Fewell, R. R., & Neisworth, J. T. (1988). Public Law 94-142: You can get there from here!. Topics in Early Childhood Special Education, 8(1), 1-11.

Grier, P. M. (1980). College and university health care professionals: An expanding team. Journal of the American College Health Association, 29(1), 7-9.

Hanft, B. E., & Humphrey, R. (1989). Training occupational therapists in early intervention. Infants and Young Children: An Interdisciplinary Journal of Special Care Practices, 1(4), 54-65.

Hirata, I., Jr. (1980). Togetherness -- The health care team. Journal of the American College Health Association, 29(1), 5-6.

Howard, A. M. (1986). Physicians, occupational therapists, and physical therapists: Professional preparation and practice trends in serving individuals with developmental disabilities. Totline, 12(3), 13-19. (A publication of the Section on Pediatrics, APTA)

Ivey, S. L., Brown, K. S., Teske, Y., & Silverman, D. (1988). A model for teaching interdisciplinary practice in health care settings. Journal of Allied Health, 17(3), 189-195.

Lander, J. L., & D'Agati, S. S. (1989). Interdiscip[linary overlap in pediatric therapy: Student perceptions (paper presentation, AOTA Annual Conference). Baltimore: unpublished paper.

Landreth, G. L., Jacquot, W. s., & Allen, L. (1969). A team approach to learning disabilities. Journal of Learning Disabilities. 2(2), 24-29.

Los Angeles Children's Hospital. (1985). Recommendations for OT/PT role delineation for developmental evaluation (unpublished procedures). Los Angeles: unpublished.

Madsen, M. K., Gresch, A. M., Petterson, B. J., & Taugher, M. P. (1988). An interdisciplinary clinic for neurologically impaired adults: A pilot study for education students. Journal of Allied Health, 17(2), 135-141.

McCollum, J. A., & Thorp, E. K. (1988). Training of infant specialists: A look to the future. Infants and Young Children: An Interdisciplinary Journal of Special Care Practices, 1(2), 55-65.

McGonigel, M. J., & Garland, C. W. (1988). The individualized family service plan and the early intervention team: Team amd family issues and recommended practices. Infants and Young Children: An Interdisciplinary Journal of Special Care Practices, 1(1), 10-21.

Mehn, J. H., Dennis, S. W., & Rybsk, D. A. (1986). PT/OT role delineation in a combined department. Clinical Management in Physical Therapy, 6(3), 30-33.

Scull, S., & Deitz, J. (1989). Competencies for the physical therapist in the neonatal intensive care unit (NICU). Pediatric Physicl Therapy, 1(1), 11-14.

U.S. 99th Congress. (1987), November 18). Education of the Handicapped Amendments of 1986. Federal Register, pp. 1145-1177.

Weston, C., & Cranton, P. A. (1986). Selecting instructional strategies. Journal of Higher Education, 57(3), 259-288.

Williamson, G. G. (Ed.). (1987). Children with spina bifida: Early intervention and preschool programming. Baltimore: Paul H. Brookes.

Wodrich, D. L., & Joy, J. E. (Eds.). (1986). Multidisciplinary assessment of children with learning disabilities and mental retardation. Baltimore: Paul H. Brookes.

APPENDIX A

PRE/POST-TRAINING QUESTIONNAIRE GIVEN TO STUDENTS

Appendix A

Before proceeding to the following pages, please answer this question first.

Answer the following questions based on your knowledge of and/or experiences in pediatric therapy.

1. What is the difference between a pediatric OT and a pediatric PT? Describe the similarities and differences.

2. Note the degree to which each of the disciplines would address or use the following areas:

frequently	2
infrequently	1
never	0

OT	PT	
1. ___	___	dressing
2. ___	___	feeding
3. ___	___	grooming/hygiene
4. ___	___	toileting
5. ___	___	language/communication skills
6. ___	___	cognitive skills
7. ___	___	gait
8. ___	___	hand skills
9. ___	___	sitting
10. ___	___	gross motor
11. ___	___	fine motor
12. ___	___	sensorimotor
13. ___	___	perceptual-motor development
14. ___	___	LE function
15. ___	___	UE function
16. ___	___	tactile defensiveness
17. ___	___	vestibular dysfunction
18. ___	___	positioning equipment
19. ___	___	adaptive chairs (seating)
20. ___	___	adapted utensils (feeding, writing)

	OT	PT	
21.	___	___	adapted clothing
22.	___	___	UE orthotics
23.	___	___	LE orthotics
24.	___	___	use of vibrators
25.	___	___	use of hanging equipment
26.	___	___	hippotherapy
27.	___	___	hydrotherapy
28.	___	___	electrotherapy
29.	___	___	biofeedback
30.	___	___	computer applications
31.	___	___	treatment in home setting

APPENDIX B

SELECTED CLASSIFICATIONS FOR ANALYSIS OF QUESTIONNAIRE AND INTERPRETATION OF DATA

Appendix B

Coding for question #1 consisted of six major categories with other subcategories within each of those. The six major classification codes were:

1. OT characteristic
2. PT characteristics
3. Similarities
4. Differences
5. Working together
6. Implied superiority

In general, the results show that the PT students could correctly identify different characteristics of each of the professions, but did not identify many similarities. Conversely, the OT students identified more similarities than differences. Only four students (n = 17) mentioned that the two professions work together, with only two indicating the importance of working together. (Lander & D'Agati, 1989)

APPENDIX C

QUESTIONNAIRE GIVEN TO NEW GRADUATES

Appendix C

The questionnaire given to new graduates was the same as Appendix A with the exception of the inclusion of the following (raw data included):

At the beginning:

PT _14_ OT _8_ (n = 22)

Years experience: <1yr _18_, 12-18 mo _3_, 18-24 mo _1_.

Facility: Private practice _3_, Out-patient agency _2_,

Acute Gen. Hospital _6_, Acute Peds. Hosp. _7_,

Rehab. Hosp. _4_, Other _____.

At the end:

When you were in your entry level professional program, did you have any classes together with the other professional students (PT or OT)? Y _19_ N _3_

If YES, which classes? (anatomy, physiology, and other lower division courses)

Did any of your classes address teamwork in the pediatric setting? Y _2_ N _20_

If YES, was this a multidisciplinary (OT and PT) class? Y _0_ N _2_

Do you feel that it would have been beneficial for you to have a class which dealt with teamwork issues and was open to both professions? Y _22_ N _0_

(Answer only if you take PT and/or OT students at your facility) Do you feel that such an interdisciplinary class should be a requirement of the pediatric intern? Y _20_ N _2_

APPENDIX D

PHONE INTERVIEW QUESTION LIST FOR UNIVERSITY PROGRAMS

Appendix D

PHONE INTERVIEW QUESTION LIST

PT 9 OT 4 (n = 13)

1. Do you have both physical and occupational therapy programs at your university? Y 9 N 4

1a. If no, do any of the classes teach team approach strategies? Y 1 N 3

1b. If no, do any of the classes teach the students about the other profession's skills?

Y 0 N 4

2. Does your curriculum teach any courses which specialize in pediatric therapy? Y 12 N 1

2a. If yes, is it a required or elective course?

R 2 E 12

3. Does the other professional program teach any courses which specialize in pediatric therapy?

Y 10 N 3

3a. If yes to both #2 and #3, do the two departments combine or cross-teach the two courses?

Y 0 N 10

3b. If yes to 3a, describe the interaction of the two courses.

3c. If no to 3a, do think that this might work in your setting? Y 2 N 8

3d. If no to 3c, why not?

(Depts. physically apart, difficult to design, difficult to coordinate, no interest)

4. Do you think that it important that the students be able to function effectively on a team after they graduate from your program? Y 11 N 2

4a. If no, do you feel that the students will pick up this skill equally well on the job after graduation? Y 2 N 0

APPENDIX E

PHOTOGRAPH AND AUDIO RELEASE FORM

Appendix E

PHOTOGRAPH AND AUDIO RELEASE FORM

I,_____ give full consent to have my photograph and/or my voice facsimile used in the following manner:

1. As part of a slide-tape presentation for educational purposes in the university setting,

2. As part of a slide-tape presentation for educational purposes at conferences, seminars, or other appropriate meetings,

3. As part of publication in a professional journal.

I have been thoroughly informed as to the true purpose and uses of the slides and tapes.

_____

Signature

_____

Date

_____

Witness

_____

Date

APPENDIX F

PHYSICAL THERAPY CLASS SYLLABUS

Appendix F

SYLLABUS

Session	Time	Topic
1*	1:00	Intro to seminars, NICU, research project, films: Special Care, Born Dying, role delineation, team approach
2	1:00	NICU continued, feeding, handling tech film: Behavior of the Premature Infant
*	2:30	Private Practice Forum: - OT, PT, SpT.
3	1:00	films: A Neurodevelopmental Analysis of Normal Movement Patterns. Discussion.
4	1:00	O - 3 assessments.
5*	1:00	Present Research Critiques
6	1:00	Special populations, special handling
*	3:00	Movement Lab.
7	1:00	Practice settings. Assessment and treatment, bring a rag doll.
	2:00	Guest speaker: Early Interventionist (public school system, Deaf ed.)
8	1:00	Assessment and treatment, continued.
9*	1:00	Parent training, interdisciplinary problem solving, group dynamics.
10	1:00	Play and Toys: Use in treatment, criteria for choosing safe and appropriate toys.
*	2:30	NICU Practice Forum: PT, OT, SpT, RN
11		Independent Study
12	1:00	Guest speaker: Speech Therapist, PhD.
	2:30	Public awareness, public policy and politics - child abuse.

Session	Time	Topic
13		Independent Study
14*	1:00	OT/PT group case study presentations.
Exam Week		by appointment: assessment competency

* Required attendance. OT and PT students meet together

Course Objectives

Given readings, lectures, demonstrations, class discussions, practical exercises, and clinical experiences, the student will be able to:

1. Demonstrate knowledge of current trends in pediatric research
2. Develop and demonstrate competency in administering a pediatric assessment.
3. Describe the rôle of the physical therapist in the neonatal intensive care unit.
4. Demonstrate the ability to plan and perform appropriate treatment activities, given a variety of pediatric conditions.
5. Discuss the use of toys and play in pediatric physical therapy
6. Describe criteria for toy selection in developmental assessment and treatment.
7. Construct adaptive equipment and/or toys for use in physical therapy
8. Demonstrate knowledge of appropriate parent education techniques.
9. Demonstrate an understanding of the physical therapist's rôle in public awareness and political advocacy for children.
10. Demonstrate ability to apply theoretical and practical knowledge of pediatric evaluation and treatment techniques by completing an assigned case study.
11. Demonstrate the ability to work cooperatively with a pediatric occupational therapist in designing complementary treatment plans.
12. Describe accurately, the similarities and differences between pediatric PT's and pediatric OT's.
13. Acquire and apply pediatric knowledge and experience given an NICU clinical opportunity to give direct care.
14. Demonstrate the ability to assume responsibility for self instruction and for sharing knowledge with peers.
15. Practice professional work habits in the execution of course assignments, projects, and activities.

APPENDIX G

CASE STUDY ASSIGNMENT

Appendix G

Pediatric Seminar Case Study

Part I

Each student will be assigned to an OT/PT team. Given the evaluation data of a case, the team must work together to develop the following:

1. A comprehensive problem list.

2. OT goals and PT goals. Each set of goals must be prioritized and keyed to specific problems identified on the problem list. All problems identified in the list must be addressed by one or both disciplines.

3. Therapy procedures. Each discipline must describe at least 3 specific treatment activities per goal.

4. Therapy scheduling. Describe when, where, and how often therapy will be given. How long will sessions be? Will there be any joint treatment sessions? Will OT and PT sessions be scheduled to benefit each other?

5. Recommendations for other services and equipment. Include: a) at least one other professional discipline the child should be referred to and why; b) one community agency or service the child and/or family should be referred to and why; and c) at least one piece of adapted equipment which would be appropriate for the child and why.

Each team must present the above information to the class. Each team must hand in two copies (typed) of the treatment plan. All members of the team must sign the plan.

Part II

Each student must write an initial therapy report summarizing evaluation data, main problems, and therapy goals. Include recommendations for adapted equipment, referral to other services, need for further evaluation, and parent/teacher recommendations. Attach a bibliography of any references used.

Summary reports must be done individually (not by the team). They must be clear and concise, typed, and a maximum length of two (2) pages. Only one copy is necessary to go to your primary professor.

APPENDIX H

OTHER PT STUDENT PROJECTS

Project I

Purpose: Review the current trends in pediatric physical therapy research and practice.

Method: Review the last ten years of physical therapy professional literature. Especially look at journals other than Physical Therapy. Identify trends in pediatric research and practice. Choose and critique one article of particular interest to you, preferably from other than the journal of the APTA. Present your findings in class.

Critique: Must include:

Short review of trends prior to date of article chosen.
Sample description and sampling technique.
Methodology, validity/reliability.
Data/analysis.
Conclusions, appropriate or not?
Short critique of article.

Paper: is to be short! Can be in informative outline style with a short paragraph (critique) at end.

A copy of the article must be attached to the paper.

The following topics are recommended. Any other topic must have prior approval.

1. Rhizotomy, therapy.
2. Efficacy of early intervention.
3. Bracing, splinting, serial casting.
4. AIDS, therapy, intervention, (congenital).
5. Drug exposed neonates, intervention, (0 - 5 yrs).
6. Vestibular/balance. development, assessment, therapy (0 - 5 yrs).
7. Sensory stimulation in NICU. Responses to sensory stim in therapy or in environment. (Sensory stim deprivation).

Project II

Purpose: To develop OT-PT team work, cohesiveness, and professional respect.

To integrate knowledge of the differences and similarities of OT/PT treatments for a variety of pediatric disabilities in designing complementary treatment plans.

Method: Within an OT-PT team, develop a joint treament plan for the assigned disability. The joint treatment program must complement each other's professional goals for that child.

[see Appendix G for description of project.]

Project III

Purpose: To develop competency (proficiency) in administering a pediatric assessment.

Method: Select a pediatric assessment from those available in the department or in the community. Learn the testing procedures and administer the test a minimum of ten (10) times. At least seven (7) of the practice administrations must be done on normal children. Demonstrate competency by administering the test to a normal child in the presence of the professor.

Project IV

Purpose: To acquaint the student with the processes of the team approach to therapeutic intervention.

To allow the student to acquire some hands-on experience in the NICU.

Method: Choose A or B

A. 1. Participate in the handling of NICU babies for 4 - 6 sessions and
   2. Attend on interdisciplinary team meeting (written report required).

or:

B. Attend three interdisciplinary team meeting at different facilities (with written reports comparing and contrasting the styles).

Report for Team Meetings:

For one meeting: Observations must include, but are not limited to, the following questions:

1. Who is in attendance? No names, just professions, etc.
2. Physical environment?
3. Length of meeting?
4. How many cases were discussed?
5. Was ther a designated leader? Apparent leader?
6. Formal vs. informal format?
7. Record keeping?
8. Group dynamics?
9. In your opinion, what was the best aspect of the meeting and why?
10. What was the most disapointing aspect of the meeting and why?

For three meetings:

1. Do the above for each of the meetings which you attend.
2. Compare and contrast the meeting styles among the three.

Project V (Optional)

Purpose: To familiarize the student with toy selection and adaptation techniques for infants and handicapped children.

Method: The student will adapt a toy or a game appropriately for an infant or child with a specific diability. This project needs to have prior approval of professor. The student will also give a short presentation regarding the toy or game used.

APPENDIX I

PARENT TRAINING HANDOUT

Appendix I

PARENT TRAINING

Why train or teach a parent?

What aspects of treatment should be taught to parents?

What do you teach parents first?

How do you decide what progression of training to use for a particular child/

What parents think is IMPORTANT.

What parents THINK is important.

Coordinating other home programs with yours.

Effects of giving the parents too much to do.

Effects of giving the parents too little to do.

Ethical, moral, legal aspects (responsibilities) encountered when deciding on type and amount of parent training appropriate.

Teaching parents how to be a good selector of appropriate toys: commercial, homemade, adapting if necessary, adapting with switches.

Making homemade toys and equipment: are there legal problems?

Written instructions; pre-written instruction sheets.

How to teach parents:

1. demonstrate with verbal explanation;
2. hands-on demonstration;
3. independent return demonstration from parent;
4. explanation of written instruction compared to demonstration;
5. next session, review technique with parent.

APPENDIX J

COOPERATIVE GROUP GAMES

Appendix J

Blindfolded Line-up

Goal: For the group to line up, without talking, following a given criteria.

Safety and Rules:

1. This game must be done in an area free of obstacles.
2. Have each participant blindfold themselves and then stand quietly until they receive further instructions.
3. Individually, whisper the name of an animal in their ear. The following are some animals that are fun and thought provoking: mouse, squirrel, kitten, cat, poodle, german shepherd, sheep, goat, cow, horse, elephant, tiger, giraffe, lion, moose, duck, parakeet, goose, grizzly bear, frog, snake, wolf, bull, pony, clydesdale, seal, dolphin, whale, turkey, dove, hippopotamus, monkey, gorilla.
4. When everyone has an animal, inform the group that their task is to line up in order of animal size - smallest to largest, without talking. They may only make the noise of the animal.
5. Remind the group to walk slowly with their hands up in front of them as "bumpers" to protect themselves.

Variations:

Be creative with blindfold line-ups. Give each person a secret number and have the group line-up in numerical order non-verbally. It is more interesting if the numbers are random and may not have a number given out that is in succession to another number.

Processing:

Blindfolded games can be very anxiety producing, especially for emotionally stressed individuals. Observe who actually seeks out other group members and who waits until someone comes to them. Make mental notes of the different types of communication tried. Who was successful in their attempts at new forms of communication? Who had difficulty not peeking? Why? How important was trust in this initiative? Discuss the processing for this game after completion.

Group Get-up

Goal: For the group to stand up together using the following guidelines.

Set-up: This game is started by having everyone pair off with someone of the same or close to the same weight. Have them sit on the ground with their feet (toes) touching, their knees bent, and holding hands. They are then to pull against eachother in an attempt to come to a standing position at the same time.

Then put the group together. The original means of accomplishing the goal will no longer be valid, they will be forced to problem solve as a whole.

Rules:

1. Hands should be grasped so that an electrical current could flow (eventually) through every group member.
2. Feet should be arranged with the same thought in mind.
3. All group members must come off the ground at the same time.

Safety:

Be sure that when you set up that there are no obstacles behind members where they might fall back. If this is not possible, spotters need to be strategically placed at those obstacles so no one gets hurt.

Processing:

Teamwork and cooperation are part of this game. How did the group deal with greater numbers of people? What was the impact of communication? Explore the changes in strategies and who initiated them. Discuss the processing after completion.

Crossing the River

Goal: To problem solve a way to get two teams to opposite ends of the bridge.

Rules: All members of one team must pass the other team on the bridge without falling "into the river". Feet must not touch the floor.

Set-up: Place the group members on a balance beam and instruct them that they must switch sides without stepping off the bridge. A group of 14 will fit nicely on two eight-foot 2 x 4 balance beams end-to-end.

Processing:

The close physical contact required for this game may stir up personal boundary issues. It may be difficult for members to be that close without sexuality or personal space issues surfacing. Discuss the processing for both successful and unsuccessful attempts to switch places on the balance beam at the end of the game.

These games are from Experiential Therapists, Inc. (in press).

APPENDIX K

STUDENT RESPONSE EXAMPLES: PRE-POST

Appendix K

The following are comparisons of the physical therapy students' responses (pre- and post-training) to the first page of the questionnaire:

Student #1:

> Pre: "Similarities: Both pediatric P.T.'s and O.T.'s must concentrate on making the child believe that he/she is playing, while actually a goal is being achieved. Differences: I think pediatric physical therapy involves the entire child, meaning all extremities, trunk, head. It is difficult to say that O.T.'s will treat only the UE [upper extremities] or that P.T.'s treat only the LE's [lower extremities] because this is probably not realistic. O.T.'s concentrate more on fine motor skills. P.T.'s treat almost entire body".
> Post: "...Even though there are a few differences, the P.T. and O.T. MUST ALWAYS [sic] work together at sometime for those patients who are being treated by both disciplines."

Student #2:

> Pre: "Pediatric PT deals with identifying abnormal function of musculoskeletal system resulting from CNS, PNS, or muscle disorders, and the application of techniques and methods to return function to as close to normal as possible. Pediatric OT deals with teaching impaired children to perform ADL's optimumly [sic] within his/her available function in order for the child to function as normal as possible in his/her environment."
> Post: "...with the emphasis being on working as a team for the good of the child. Teams should not only comprise of OT's and PT's but anyone else treating the child."

Student #3:

Pre: "PT deals with the whole body, concentrating on gait and assesment [sic] of deficiencies in development. OT concentrates more on functional daily activities, especially focusing on the upper extremities. Both do evaluations and improve the function of the disabled child."
Post: "The PT and OT may work with the same child and have similar goals, but the treatments may vary. They should work closely so their programs give the child the best treatment. The parent should also work with the PT/OT team..."

Student #4:

Pre: "I have very little knowledge or experience in pediatric therapy. I would say both O.T. and P.T. are working on the pts [patient's] goals together although the P.T. may be geared towards LE's, trunk, stance, & gait whereas O.T. would emphasis [sic] UE's & more skilled movement. Certain parts of therapy would differ as in electro & hydrotherapy limited to P.T.'s. O.T. would also emphsis [sic] ADLs more than P.T."
Post: "Now I know that the therapists of both disciplines work closely together to plan the child's overall program, some parts of which only PT will do and parts only OT will do. Sometimes they will treat a child at the same time..."

Student #5:

Pre: "OT -> More splinting & hand/arm/shoulder mvts [movements] & fcn [function]. PT -> More postural/gait, total mvt. PT & OT work together on burns, habilitation team for congenital defects. OT work more with UE fcns for school & ADLs - teach to tie shoe, dress, etc. Adaptations."
Post: "Whenever possible the disciplines should work closely together..."

Student #6:

Pre: "Similarities: both work towards better functional capacity of child. Differences: P.T.: Works with child & family to improve physical functioning of child. O.T.: probably more geared towards the family & home environment than P.T."
Post: "...I would always want to work with the OT as a team so that the family & child benefit the most from the therapies."

APPENDIX L

RAW DATA: PRE- AND POST-TRAINING QUESTIONNAIRE

Appendix L

The following refers to the second and third pages of the questionnaire. The numbers in the first column correspond to the number of the student. The numbers across correspond to the item on the questionnaire (see Appendix A). The underlined sets of numbers are those which show a change from the pre- to the post-training time. One must remember that this is how physical therapy students rated both OT and PT items.

		1	2	3	4	5	6	7	8	9	10
1	OT	2/2	2/2	2/2	1/1	0/2	2/2	0/1	2/2	1/2	2/2
	PT	1/1	1/1	1/2	0/1	0/2	1/2	2/2	2/2	2/2	2/2
2	OT	2/2	2/2	2/2	2/2	1/2	1/2	1/0	2/2	2/2	1/2
	PT	1/1	2/1	2/1	2/2	2/2	2/2	2/2	1/1	2/2	2/2
3	OT	2/2	2/2	2/2	2/2	2/1	2/2	1/0	2/2	2/2	2/1
	PT	1/1	2/2	1/1	1/1	1/1	1/0	2/2	2/2	2/2	2/2
4	OT	2/2	2/2	2/2	2/1	1/0	1/1	1/1	2/2	1/2	1/1
	PT	1/1	2/1	2/2	2/1	1/0	1/1	2/2	2/1	2/2	2/2
5	OT	2/2	1/2	2/2	2/1	0/1	0/1	1/1	2/2	0/2	1/1
	PT	2/2	2/1	2/2	1/1	1/1	1/1	2/2	2/1	2/2	2/2
6	OT	1/2	0/2	1/2	1/1	0/1	0/1	1/1	2/2	0/2	1/1
	PT	1/1	1/2	1/1	1/1	1/1	2/2	2/2	2/2	2/2	2/2

		11	12	13	14	15	16	17	18	19	20
1	OT	2/2	2/2	1/2	1/1	2/2	2/2	1/2	2/2	1/2	2/2
	PT	2/1	2/2	2/2	2/2	2/2	2/2	2/2	2/2	2/2	1/1
2	OT	2/2	2/2	1/2	1/1	2/2	2/2	2/2	2/2	2/2	2/2
	PT	2/2	2/2	2/2	2/2	2/1	2/2	2/2	2/2	2/2	2/1
3	OT	2/2	2/2	2/2	2/0	2/2	2/2	1/2	2/2	2/2	2/2
	PT	2/1	2/2	2/2	2/2	2/2	2/0	2/2	2/2	2/2	1/1
4	OT	2/2	2/2	2/2	2/1	2/2	2/2	1/1	2/2	1/1	2/2
	PT	1/1	2/1	2/2	2/2	2/2	1/1	1/2	2/2	2/2	1/1
5	OT	2/2	2/2	1/2	1/2	2/2	2/2	2/2	1/2	2/2	2/2
	PT	2/1	2/2	2/2	2/2	2/2	1/1	2/2	2/2	2/2	1/1
6	OT	2/2	1/2	1/2	1/1	2/2	1/2	0/2	0/2	1/2	2/2
	PT	2/1	2/2	2/2	2/2	2/2	1/1	2/2	2/2	2/2	1/1

		21	22	23	24	25	26	27	28	29	30
1	OT	2/2	2/2	2/0	2/2	2/2	0/1	0/0	0/0	0/1	1/1
	Pt	1/1	2/1	2/2	2/2	2/2	2/2	2/2	2/2	2/2	2/1
2	OT	2/2	2/2	1/1	2/2	2/2	1/1	1/2	1/1	1/1	2/1
	PT	2/1	1/1	2/2	2/2	2/2	2/2	2/2	2/2	2/2	2/2
3	OT	2/2	2/2	2/0	2/2	2/2	1/0	1/1	0/1	2/2	2/2
	PT	1/1	1/1	2/2	2/2	2/2	2/2	2/2	2/2	2/2	2/2.
4	OT	2/2	2/2	2/2	2/2	1/2	1/0	1/1	2/1	2/1	1/1
	PT	2/1	2/1	2/2	2/2	1/2	2/2	2/2	2/2	2/2	2/2
5	OT	2/2	2/2	1/2	2/2	1/2	1/1	1/1	2/2	2/2	2/2
	PT	1/1	1/1	2/2	2/2	2/2	2/2	2/2	2/2	2/2	2/1
6	OT	2/2	2/2	0/1	1/2	0/2	0/1	0/0	0/1	2/2	2/2
	PT	1/1	1/1	2/2	2/2	1/1	2/2	2/2	1/2	1/1	1/1

item #31

student #	1	2	3	4	5	6
OT	1/2	2/2	2/2	1/2	1/2	0/2
PT	2/2	2/2	2/2	2/2	2/2	2/2